

REMARKS

Applicants have amended the paragraph located on page 28, line 3 to line 21, of the Specification to correct a minor typographical error. Claims 1-30, 32-46, and 48-51 have been amended. Claim 47 has been cancelled and Claims 52-82 have been added. Accordingly, Claims 1-30, 32-46, 48-82 are pending in the application. The reconsideration of the application is respectfully requested.

In the July 17, 2002, Office Action, the Examiner objects to the claims because of the absence of Claim 31 which caused inconsistent claim numbering following Claim 30. The Examiner has renumbered Claims 1-51 as claims 1-50. Notwithstanding the missing claim 31, Applicants respectfully submit that Claims 1-51 should remain as originally numbered in the original application and that new claims should be numbered beginning with the number next following the highest numbered claim presented, which is Claim 52. This is consistent with Patent Office Practice and as stated in 37 C.F.R. 1.126 "When the application is ready for allowance, the examiner, if necessary, will renumber the claims consecutively". However, should the Examiner persist in renumbering the Claims, Applicants will fully comply with Examiner's requests in this regard. Accordingly, the newly presented claims are numbered as Claims 52-82.

Claims 1-30, 32-46, and 48-51 stand rejected under 35 U.S.C. Section 102(e) as being anticipated by Schutzer (U.S. Patent No. 6,292,789). Schutzer discloses a method and system for presentment of bills wherein the biller account

automatically formats a bill to conform to standard bill definition language for a consumer and automatically stores the formatted bill in a storage location, such as a commerce document server (CDS) (see Schutzer Abstract and Figs. 1-7). More specifically, a bill service provider (BSP) formats the bill and places the bill directly in the biller's mailbox for electronic mailing. Then, a consumer service provider (CSP) accesses the electronic bill produced by the bill service provider, along with other bills for the consumer, stores the bill(s), and presents the bill(s) to the consumer. Schutzer, therefore, provides a method and system that enables a plurality of inter-related entities and applications to interact with each other to provide electronic bill presentment and payment. Billing information are transferred from the billers to a BSP, from the BSP to a CDS, from the CDS to a CSP, and then finally from the CSP to the consumer. These separate entities and applications are authenticated by another entity, the certificate authority (see Schutzer Figs. 1-7). As can be seen, the billing information is routed through multiple applications and entities before it is finally presented to the consumer. In addition, because of the limitation with coordinating interactions between multiple entities and applications, Schutzer provides a system in which incoming billing data is processed without transformation before it is presented to the consumer. Schutzer, in fact, formats the bills into a standard bill definition language to prepare it for routing through multiple entities and applications.

In contrast, the present invention provides an end-to-end electronic bill

presentment and payment (EBPP) system that communicates in lingua franca to enable any and all billers to interface with each other to cooperatively present and accept payment of bills using a "rules application process [that] uses a special rules development language ... to generate a translator that parses the biller's data stream into a common document model tree. In the tree, the data and their attributes are mapped into nodes which fit the common document model for storage in the data base. Because of the generic and universal nature in which the billing data and its attributes are stored, the database can be coupled to presentment processors that may include style sheets and other applications that transform the stored data into whatever desired form and format to support bill presentment wherever and whenever desired." (see Applicants' Specification, page 9, lines 10-19). In other words, a common format document model is used to transform data and attributes into a form that can be stored in a common format storage model before the data is processed (see Applicants' Specification, page 8, lines 17-18). Storing the transformed data before processing allows the present invention (1) to efficiently present the bill to the consumer; (2) to query the stored data; (3) to control how it will be presented (e.g., brand building); and (4) to use the stored data as a customer service tool (e.g., help desk) (see Applicants' Specification, page 10, lines 3-7). The use of the common format document model and the universality of its structure allows the billers to maintain control, from a billing console functionality, over their billing data and how it is presented

on any desired platform using any desired applications, formats and protocols (see Applicants' Specification, page 10, lines 14-16). For example, "the database can simultaneously present bills for different customers from a single batch of bills in various spoken languages, on HTML based browsers, on OFX supported applications, or in any other way desired by any biller or customer" (see Applicants' Specification, page 10, lines 20-22). Applicants' common model document processing functionality provides for a generic conversion process that is not confined to a particular industry, biller, or type of customer. Consequently, these features allow billers to, among other things, leverage and build brand, in addition to providing billers with the ability to control the way the bill looks, what is contained in the bill and why, and how and according to what terms the bill can be paid (see Applicants' Specification, page 11, lines 12-15).

Claims 1, 10, 17, 18, 41, 45, 46, 48, and 50 stand rejected under 35 U.S.C. Section 102(e) as being anticipated by Schutzer. Independent Claims 10, 11, 13, 17, and 18 have been rewritten in dependent form to improve the organization and readability of the claims. Specifically, Claims 10, 11, 13, 17, and 18 are now dependent upon Claim 1.

Claims 1, 41, 45, 46, 48, and 50 distinguish over Schutzer at least by reciting a parsing functionality which is adapted to parse billing data from a plurality of billers using rules of conversion according to which said parsing functionality is programmed, corresponding to a plurality of data types, and to

provide relevant information for further use by said system, and a common document model processing functionality adapted to transform said relevant information into a common document model, said common document model is adapted to accommodate said relevant information from said plurality of billers and according to said plurality of data types.

Applicants respectfully traverse the Examiner's assertion that the limitation recited in independent Claims 1, 41, 45, 46, 48, and 50 of a "parsing functionality" which is adapted to parse billing data from a plurality of billers using rules of conversion according to which said parsing functionality is programmed, is anticipated by Schutzer.

In rejecting these claims, the Examiner has presented (1) *bill service provider, 104*, (2) *billers, 106*, (3) *certificate authority, 110*, and (4) *billing data*, as disclosed by *the Schutzer patent*, making reference to the *abstract, figs. 1-5, and column 13, line 11 to column 14, line 25 of the Schutzer patent* (see the Office Action dated July 17, 2002, paragraph 4) as evidence of anticipation of the "parsing function" of the present invention. Applicants cannot agree with the Examiner in view of the evidence presented herein. First, Schutzer's "[b]ill service provider 104 is an entity which accepts and consolidates bills for the biller ..." (see Schutzer, column 13, lines 20-21). Second, "[t]he certificate authority 110 [disclosed by Schutzer] is an entity which issues and revokes certificates to identify and verify service providers ... provides rules ... for compliance" (see

Schutzer, column 13, lines 28-31). The bill service provider and the certificate authority are separate entities and provide substantially different functions and services. More specifically, the bill service provider is a generic term for an entity known in the art to be a location where bills are accepted and consolidated. The certificate authority function operates as a login element that verifies the bill service provider. For example, the certificate authority may operate as a "security administrator" who grants or denies access to the system disclosed by Schutzer. Figure 1 of Schutzer clearly shows that certificate authority is one of a plurality of entities that makes up Schutzer's EBPP. Furthermore, the "rules" used by the certificate authority solely provide for authenticating the identity of senders, consisting of bill service providers, consumer service providers and the document server (see Schutzer Fig. 1-7). In other words, the certificate authority provides rules for authentication to help service providers comply with authentication requests before (1) bills are accepted and consolidated by the bill service provider; (2) bills are presented to the consumer; and/or (3) payment for the bills are accepted from the consumer. Schutzer's certificate authority does not provide a procedure or functionality for parsing a biller's data stream according to rules of conversion (as will be explained).

In contrast, the parsing functionality of the present invention, which parses billing data using "rules of conversion" to provide structural processing and conversion for the common document model for use by the bill presentment and

payment system, is a "[r]ules based parsing engine 24 [which] allows a wide variety of biller data 23 types and formats to be operated on or parsed by rules in order to fit a common document or data model which can store and process both data and its attributes" (see Applicants' Specification, page 26, lines 5-7). As disclosed by Applicants, the rules of conversion allow the data to be "at least easier to generate and correlate the attributes for various data in a form that can be used by the common document or data model" (see Applicants' Specification, page 26, lines 14-16). As can be seen, the "rules of conversion" as embodied by the present invention and the "rules of authentication" of Schutzer's certificate authority relate to two entirely different functions. The "rules of conversion" of the present invention directly affect the function of the parsing engine, the common document model, and the incoming data whereas the "rules of the certificate authority" are used for compliance to issue, revoke, and verify service providers and senders. Furthermore, Applicants see no relationship between the bill service provider as disclosed by Schutzer and the parsing function of Applicants' invention. Bill service provider is a generic entity that "forwards" bills to bill payers or to a commerce document server, as disclosed by Schutzer, to be forwarded to bill payers whereas the parsing function of the present invention resides in a parsing engine that parses incoming billing data prior to presenting the billing information.

Applicants also respectfully traverse the Examiner's assertion that the common document model processing functionality is anticipated by the evidence cited by the Examiner (specifically, Schutzer *figs. 1-7, and column 14, line 26 to column 15, line 2*). Schutzer discloses that the bill service provider converts the bill, along with enclosures, to a standard bill definition language (see Schutzer column 14, lines 32-35). "The standard bill definition language is an extension of hypertext markup language/extended markup language that allows for combining templates with data and taking digital signatures (see Schutzer, column 14, lines 35-38). In short, Schutzer discloses a bill service provider converting bills into a standard bill definition format.

In contrast, as stated in the Applicants' Specification (page 28, lines 9-17):

"[t]hink of the common document model/data model according to the present invention as a list of every field of data, and its attribute (such as, for example, bill number and tag denoting bill number) that could occur in any bill desired to be presented by any biller. Not every biller data ... will have all of that information; instead, it only has a subset of all data and attributes which could be accommodated by the common document model/data model. Accordingly, the biller's subset, which contains data and attributes which can be stored and processed according to the model, but not all of them, is known as the common document model/data model tree."

Therefore, a significant difference between Schutzer and the present invention is that Schutzer's standard definition format merely provides an instructional set of rules for formatting the bills uniformly based on pre-determined templates. On the other hand, Applicants' common document model processing functionality

provides a generic conversion process that is "not confined to a particular industry, biller, or type of customer" (see Applicants' Specification, page 9, lines 3-5) and accepts any subset of data from any biller. Fundamentally, the common model processing allows the present invention to aggregate its fields of data to accommodate bills from any biller or type of customer (see Applicants' Specification, page 28, lines 9-17). For example, a first biller may require one particular subset of data while second biller may require a similar subset data in addition to another subset of data that is substantially different from the first biller. Using the common model processing, the present invention can accommodate the first and second biller's individual data set without mandating a particular template for both billers. Therefore, billers retain autonomy on how they collect, group, display, and present their billing information. In short, Applicants' common document model processing functionality solves the problem associated with multiple billers having and requiring different information by accepting any subset of any data from any biller.

In view of the distinctions noted and the advantages attendant thereto, it is respectfully submitted that Schutzer does not teach every aspect of the claimed invention of independent Claims 1, 41, 45, 46, 48, and 50, either explicitly or impliedly. Therefore, it is submitted that independent Claims 1, 41, 45, 46, 48, and 50 clearly distinguish over Schutzer and are patentable thereover.

Claim 10 is dependent upon Claim 1 and further distinguishes over

Schutzer by reciting "an interactivity functionality adapted to detect and respond to communications from said bill payers, by at least (i) retrieving information from said database and presenting it to said bill payers in a form requested by said bill payers; and (ii) altering information in said database corresponding to said bill payers according to said communications." The Examiner cited Schutzer *figs. 1-7, and column 14, line 26 to column 15, line 2*, which discloses that the "bill can be sent or "pushed" when available or held and sent when requested, i.e., "pulled" (see Schutzer column 14, lines 51-53). The reference, however, does not disclose that bills can be presented to bill payers in a form requested by the bill payers as claimed. As disclosed by Applicants, "customers can pay ... in a manner where each bill is presented to the customer in a way that is specially tailored to the customer with graphics, advertising, and other information that has been demographically proven to connect with that particular customer" (see Applicants' Specification, page 12, lines 13-16). Succinctly, the present invention allows both billers and payers to customize and control the presentation of bills whereas Schutzer only allows billers to customize bills. Therefore, Applicants respectfully traverse the Examiner's assertion of anticipation as to the "interactivity functionality" element recited in Claim 10.

Claims 17 and 18 are dependent upon Claim 1 and further distinguish over Schutzer by reciting "a financial source interface adapted to send and receive communications to and from at least one financial entity and to alter information

in said database (at least in part) according to said financial source communications." As to Claim 17, the Examiner refers to Schutzer *figs. 1-7, and column 14, line 26 to column 15, line 2*; however, the Schutzer drawings and text referenced by the Examiner do not disclose a financial source interface as recited in Claim 17. Basically, the financial source interface of the present invention establishes a channel of communication with financial entities and provides an avenue for updating the database accurately (e.g., upon payment of a bill to prevent duplicate bills from being sent or retrieved).

As to Claim 18, the Examiner also refers to Schutzer *figs. 1-7, and column 14, line 26 to column 15, line 2*; however, the Schutzer drawings and text referenced by the Examiner do not disclose a financial source interface as recited in Claim 18. Claim 18 further distinguishes over Schutzer by reciting the financial source interface sending and receiving communications based at least in part on communications from said bill payers. For example, bill payers can authorize the bill presentment and payment system of the present invention to allow a financial entity to alter information found in the database (e.g, payers can authorize payment of a bill and allow a financial entity to accept and update the database to prevent duplicate billing). Based on the foregoing, Applicants respectfully traverse the Examiner's assertion of anticipation as to "a financial source interface" element of Claims 17 and 18.

Independent Claim 41 further distinguishes over Schutzer by reciting "a biller interface coupled to said database adapted to allow said plurality of billers to identify market segments of said bill payers according to market rules and information retrieved from said database." The Examiner cites Schutzer, *fig. 25, and column 20, lines 15-55* (see Office Action dated July 17, 2002, page 9, line 5); however, the Schutzer drawings and text referred to by the Examiner citation do not disclose a biller interface as recited in Claim 41. *Fig. 25*, to which the Examiner refers, "is a flow chart which provides further detail regarding the process of the consumer transferring to a new consumer service provider for an embodiment of the present invention" (see Schutzer column 7, lines 12-15). The text in column 20, lines 15-55, describes in further detail *figs. 15-16* which provide detail regarding the process of payment and the process of acknowledging payment, respectively. As can be seen, none of the text or figures relied on by the Examiner disclose a biller interface which allows billers to identify market segments of bill payers. In short, the portions of the Schutzer patent relied upon by Examiner in rejecting claim 41, describe a process of payment and acknowledgment of payment that are substantially different from the claimed biller interface which further empowers billers with the ability to identify and specify market segments. Therefore, Applicants respectfully traverse the Examiner's assertion of anticipation as to "biller interface" element of independent Claim 41.

Independent Claim 45 further distinguishes over Schutzer by reciting, generally in the manner of independent Claims 10 and 41, "interactivity functionality adapted to detect and respond to communications from said plurality of billers regarding market segments of said bill payers by retrieving information from said database and altering appearance and content of bills presented to said bill payers based on said communications." In rejecting claim 45, the Examiner refers to Schutzer, *figs. 1-7, and column 14, line 26 to column 15, line 2*. However, the portions of the Schutzer patent relied on by the Examiner do not disclose an interactivity functionality regarding market segments, as claimed in Claim 45. Rather, the portions of the Schutzer patent relied upon by Examiner describe the flow of information of Schutzer's bill presentment and payment system. Moreover, as stated above with respect to Claim 41, the portions of the Schutzer patent referred to by Examiner in rejecting Claim 41, namely *fig. 25, and column 20, lines 15-55*, do not disclose an interactivity functionality regarding market segments either. In short, the interactivity functionality limitation of Claim 45 further empowers billers with the ability to customize the appearance and content of bills based on market segments retrieved from the data. In view of the foregoing, Applicants respectfully traverse the Examiner's assertion of anticipation as to an "interactivity functionality regarding market segments" element of independent Claim 45.

Similarly, independent Claim 46 further distinguishes over Schutzer by

reciting "interactivity functionality adapted to detect and respond to communications from said plurality of billers regarding market segments of said bill payers by retrieving information from said database and sending marketing messages to said bill payers based on said communications." The Examiner makes reference to Schutzer, *figs. 1-7, and column 14, line 26 to column 15, line 2*. However, the referenced portions of the Schutzer patent relied upon by Examiner do not disclose an interactivity functionality regarding market segments as claimed in Claim 45.

In addition, as previously stated with respect to Claim 45, the referenced portions of Schutzer relied upon by the Examiner describe the flow of information of Schutzer's bill presentment and payment system. Applicants, on the other hand, disclose an interactivity functionality where billers can send marketing messages to payers based on information retrieved from the database. This allows billers to capitalize on the information residing on the database. Therefore, in view of the foregoing, Applicants respectfully traverse the Examiner's assertion of anticipation as to an "interactivity functionality regarding market segments" element of independent Claim 46.

Independent Claim 48 further distinguishes over Schutzer by reciting "an agent interface coupled to said database adapted to allow a plurality of agents having agency relationships with said plurality of billers to communicate with said bill payers regarding bills." The Examiner did not offer any evidence of

anticipation for this element. Therefore, Applicants respectfully traverse the Examiner's assertion of anticipation as to an independent Claim 48.

Independent Claim 50 further distinguishes over Schutzer by reciting "bill payer interactivity functionality adapted to detect and respond to communications from said bill payers, by at least retrieving information from said database corresponding to said bill payers and presenting said information to said bill payers in a form requested by said bill payers; and biller interactivity functionality adapted to detect and respond to communications from said plurality of billers, by at least retrieving information from said database corresponding to said plurality of billers and presenting said information to said plurality of billers in a form requested by said plurality of billers." The Examiner did not provide any evidence of anticipation for these two elements. Therefore, Applicants respectfully traverse the Examiner's assertion of anticipation as to an independent Claim 50.

In view of the distinctions noted and the advantages attendant thereto, it is respectfully submitted that Schutzer does not teach every aspect of the claimed invention of dependent Claims 10, 17, 18 and independent Claims 1, 41, 45, 46, 48, and 50 either explicitly or impliedly. Therefore, it is submitted that independent Claims 1, 41, 45, 46, 48, and 50 clearly distinguish over Schutzer and are patentable thereover. Claims 2-20 are dependent upon Claim 1; Claims 42-44 are dependent upon Claim 41; Claim 49 is dependent upon Claim 48 and Claim 51 is dependent upon Claim 50. Claims 2-20, 42-44, 49 and 51 are believed to be

patentable along with respective parent claims.

Independent method Claims 21, 30, 32, 33, 35 and 36 also stand rejected under 35 U.S.C. Section 102(e) as being anticipated by Schutzer. Independent Claims 30, 32, 33, 35 and 36 have been rewritten in dependent form to improve the organization and readability of the claims. Specifically, method Claims 30, 32, 33, 35 and 36 are now dependent upon Claim 21.

Claim 21 is directed to a method of providing electronic bill presentment and payment and distinguishes over Schutzer by reciting method steps that are similar to limitations recited in system Claim 1 as to the use of rules of conversion to extract information from billing data and the transformation of information into a common document model. Claims 21 distinguishes over Schutzer by reciting, inter alia, the steps of "extracting relevant information from billing data, corresponding to a plurality of data types, from a plurality of billers using rules of conversion"; and "transforming said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from said plurality of billers and according to said plurality of data types."

As previously discussed hereinabove with respect to Claim 1, "rules of conversion" are substantially different from "rules of authentication" because, in summary, "rules of conversion" is directed toward a processing functionality for parsing biller's data stream, whereas "rules of authentication" act as a login

element to provide access verification. The "rules of conversion" of the present invention directly affect the function of the parsing engine, common document model, and the incoming data itself while the "rules of the certificate of authority" from Schutzer are used for compliance. In addition, Schutzer's standard definition format merely provides an instructional set of restrictions for converting the bills uniformly based on pre-determined templates, whereas Applicants' common model document provides a generic conversion process that is not restricted to a particular industry, biller, or type of customer.

In view of the foregoing, it is respectfully submitted that Schutzer does not teach every aspect of the claimed invention of independent Claim 21, either explicitly or impliedly. Consequently, independent Claim 21 clearly distinguishes over Schutzer and is believed to be patentable over Schutzer. Claims 22-30, and 32-38 which are dependent upon Claim 21, are believed to be patentable with parent Claim 21.

Claim 30 further distinguishes over Schutzer by reciting the method step of "detecting and responding to communications from bill payers, by at least (i) retrieving information from said database and presenting it to said bill payers in a form requested by said bill payers and (ii) altering information in said database corresponding to said bill payers according to said communications." As stated above with respect to Claims 1 and 10, the present invention allows both billers and payers to customize and control the presentation of bills. Schutzer, on the

other hand, only allows billers to customize and payers to request bills. Therefore, it is respectfully submitted that Schutzer does not teach every aspect of the claimed invention of dependent Claim 30, either explicitly or impliedly. Consequently, Claim 30 clearly distinguishes over Schutzer and is believed to be patentable over Schutzer.

Claim 35 further distinguishes over Schutzer by reciting "sending and receiving communications to and from at least one financial entity and altering and storing information according to said communications." The Examiner cited Schutzer, *figs. 1-7, and column 14, line 26 to column 15, line 2*; however, the portions of the Schutzer patent referred to by the Examiner do not disclose the step as recited in Claim 35. Thus, Schutzer does not teach every aspect of the claimed invention of Claim 35, either explicitly or impliedly. Therefore, it is respectfully submitted that Claim 35 clearly distinguishes over Schutzer and is believed to be patentable thereover.

Claim 36 further distinguishes over Schutzer by reciting "detecting and responding to communications from said bill payers regarding at least one of said bills of said bill payers presented by said system, by at least (i) retrieving information from said database and presenting it to said bill payers in a form requested by said bill payers and (ii) altering information in said database corresponding to said bill payers according to said communications; and sending and receiving communications to and from at least one financial entity based at

least in part on communications from said bill payers and to alter information in said database corresponding to said bills of said bill payers, according at least in part to said communications." As stated above with respect to Claims 10 and 18, the present invention allows both billers and payers to customize and control the presentation of bills, whereas Schutzer only allows billers to customize and payers to request bills. Schutzer does not disclose that bill payers can customize and control the presentation of bills. Therefore, Claim 36 clearly distinguishes over Schutzer and is believed to be patentable thereover.

Claim 39 is directed to a system for presenting and paying bills and distinguishes over Schutzer by reciting, in a manner similar to Claim 1, "an extractor functionality which is adapted to parse billing data from a plurality of billers using rules of conversion according to which the extractor functionality is programmed, corresponding to a plurality of data types, and to provide relevant information for further use by said system; a common document model processing functionality adapted to transform said relevant information into a common document model, which common document model is adapted to accommodate said relevant information from said plurality of billers and according to said plurality of data types." Therefore, Claim 39 is believed to be patentable for the reasons given above with respect to Claim 1. Claim 40, which is dependent upon Claim 39, is believed to be patentable with parent Claim 39.

New Claims 52-82, of which only Claims 52, 63, and 72 are independent

claims, have been added. Claim 52 is directed to a system for presenting and paying bills, and distinguishes over Schutzer by reciting elements that are similar to limitations recited in system Claim 1 as to the use of rules of conversion for the parsing functionality and the common document model. Claim 52 further distinguishes over Schutzer by reciting "a modularized input processing engine, said input processing engine adapted to preprocess billing data from a plurality of billers corresponding to a plurality of data types." The advantage of using a modularized processing engine is that this facilitates scalability and expandability. For example, if a new form of biller data is encountered or must be dealt with for transformation into a form and format, the modularized input processing engine of Claim 52 allows for the processing of the new biller data in a modular way (see Applicants' Specification, page 25, lines 17-19). There may be separate engines for each new form of data so that the output of each preprocessing engine is ready for processing by rules based parsing engine. In other words, because the preprocessing of biller data is modularized, new input processing engine can easily be integrated to handle new data types. In addition to the modularized input element, Schutzer does not disclose, teach or suggest the parsing rules of conversion and common document model element as claimed in Claim 52, in a manner similar to Claim 1. Therefore, Claim 52 is believed to be patentable for the reasons given above. Claims 53-62 are dependent upon Claim 52 and are believed to be patentable with parent Claim 52.

Claim 63 is directed to a method of providing electronic billing and distinguishes over Schutzer by reciting method steps that are similar to limitations recited in system Claim 1 as to the use of rules of conversion to extract information from billing data and the transformation of information into a common document model. Claim 63 further distinguishes over Schutzer by reciting the step of "modularizing the preprocessing of billing data from a plurality of billers corresponding to a plurality of data types." As previously discussed with respect to Claim 52, modularizing the preprocessing of biller data facilitates scalability and expandability without disrupting the present system configuration. Therefore, Claim 63 is believed to be patentable for the reasons given above. Claims 64-71 are dependent upon Claim 63 and are believed to be patentable with parent Claim 63.

Claim 72 is directed to a system for presenting and paying bills, and distinguishes over Schutzer by reciting elements that are similar to limitations recited in system Claim 1 as to the use of rules of conversion for the parsing functionality and the common document model. Claim 72 further distinguishes over Schutzer by reciting "control functionality adapted to allow said plurality of billers to control at least one of said parsing functionality, said common document model functionality, said database functionality, and said presentation functionality." As is stated hereinabove, a common model document model is used to transform data and its attribute in to a form that is stored before it is

processed. The use of the common model document model in collaboration with the control functionality of Claim 72 allows the billers to maintain control over their billing data and how it is presented. Therefore, features may vary for each bill, including tacking advertisements onto the presented bills. In short, the control functionality allows billers to exercise substantial management and administrative control over the electronic bill presentment and payment process.

As disclosed in the Applicants' Application as originally filed, Figures 7-32 show a series of web pages for the preferred embodiment in which billers are enabled to perform a number of functions for managing electronic bill presentment and payment, such as system administration, reporting management, quality control, operations management, marketing, and customer service. More specifically, Figures 15-18 show that billers can manage an electronic bill presentment and payment operations center in which billers may control documents received from consumers. Figures 19-21 disclose web pages in which billers can manage communications with consumers. Figures 24-32 show that billers can support a customer service program with the present invention.

Schutzer does not disclose, teach or suggest any of the control functionality features of Claim 72. Essentially, Schutzer discloses an automatic EBPP system in which "flat or formatted" bill files from billers are converted, along with enclosures, such as regulatory documents, inserts, and advertisements, to a standard bill definition language by the bill service provider (see Schutzer,

Column 14, lines 29-35). After decrypting the bill from the bill service provider, the consumer service provider presents the bill to the consumer.

In contrast, Claim 72 provides a control functionality in which billers do not lose control over their data once it is received by the system of the present invention. In fact, the control functionality empowers billers with unprecedented management and administrative control over the EBPP system and process. The control functionality may allow billers to, among other things: (1) control parsing rules in the input processing engine to accommodate virtual groups according to virtual groups functionality; (2) interact with customers while seeing their billing records, using customer service and interaction management functionality; (3) control how bills or reminders are sent to customers using e-mail and other forms of delivery services; (4) control appearance and other characteristics of bill presentment in real time using presentment and distribution relationship management functionality; (5) get reports and otherwise control the billing process (including for example, obtaining parsing reports, getting account receivable information or feeds, stopping or starting print or enrollment, and other tasks) using biller interaction management; (6) support its own website for presentment and payment of bills; and (7) get paid (see Applicants' Specification, page 37, line 11 to page 38, line 5).

In view of the distinctions noted and the advantages attendant thereto, it is submitted that Claim 72 clearly distinguishes over Schutzer and is believed to be

patentable thereover. Claims 73-82 are dependent upon Claim 72 and are believed to be patentable with parent Claim 72.

In summary, Claims 1-30, 32-46, and 48-82 are believed to be allowable for the reasons given herein. Accordingly, these claims remain pending following entry of this Amendment, and are in condition for allowance at this time. As such, Applicants respectfully request entry of the present Amendment and reconsideration of the application, with an early and favorable decision being solicited. Should the Examiner believe that the prosecution of the application could be expedited, the Examiner is requested to call Applicants' undersigned attorney at the number listed below.

Respectfully submitted:

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MARKED-UP VERSION OF PARAGRAPH OF THE
SPECIFICATION AS AMENDED IN AMENDMENT A

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Specification:

Figure 3 shows a more detailed diagram of functionality that processes biller data 23 and stores it in database 26 according to a common document model/data model. The broad idea that Figure 3 seeks to convey is the notion of modularity in taking various types of biller data 23, preprocessing where necessary, and parsing according to rules in parsing engine 24 (which may be need not be done according to a URDL 25), in order to place that biller data 23 in the form of a common document model tree. Think of the common document model/data model according to the present invention as a list of every field of data, and its attribute (such as, for example, bill number and tag denoting bill number) that could occur in any bill desired to be presented by any biller. Not every biller's biller data 23 or bill will have all of that information; instead, it only [as] has a subset of all data and attributes which could be accommodated by the common document model/data model. Accordingly, the biller's subset, which contains data and attributes which can be stored and processed according to the model, but not all of them, is known as the common document model/data model tree 38. Tree 38, or fairly close to it, is the output of parsing engine 24. Database loader 40 then takes tree 38 and loads it efficiently, effectively, and in conventional fashion in the same sort of way various subsets of data are loaded, for example into a global

XML data model, onto database 26 which is structured according to common document model/storage models of the present invention.

MARKED-UP VERSION OF THE CLAIMS
AS AMENDED IN AMENDMENT A

1 1. (Amended) A system for presenting and paying bills, comprising:

2 [a.] parsing functionality which is adapted to parse billing data from a
3 plurality of billers using rules of conversion according to which [the] said parsing
4 functionality is programmed, corresponding to a plurality of data types, and to
5 provide relevant information for further use by said system;

6 [b.] a common document model processing functionality adapted to
7 transform said relevant information into a common document model, [which] said
8 common document model is adapted to accommodate said relevant information
9 from [the] said plurality of billers and according to [the] said plurality of data
10 types;

11 [c.] a database adapted to store [the] said transformed information from
12 [the] said common document model processing functionality; and

13 [d.] presentation functionality adapted to retrieve information from said
14 database and output at least some of said information via a network for use by bill
15 payers.

1 2. (Amended) [A] The system according to claim [1 in which the] 1, wherein said
2 parsing functionality is adapted to parse data from a print stream of data provided
3 by [a biller.] said plurality of billers.

1 3. (Amended) [A] The system according to claim [1 in which the] 1, wherein said
2 parsing functionality is adapted to parse data from a data interchange stream of

3 data provided by [a biller.] said plurality of billers.

1 4. (Amended) [A] The system according to claim [1 in which the] 1, wherein said
2 parsing functionality is adapted to parse data from a financial data stream provided
3 by [a biller.] said plurality of billers.

1 5. (Amended) [A] The system according to claim [1 in which the] 1, wherein said
2 presentation functionality is adapted to output information for use by said bill
3 payers using financial software.

1 6. (Amended) [A] The system according to claim [1 in which the] 1, wherein said
2 presentation functionality is adapted to output information for use by said bill
3 payers not using financial software.

1 7. (Amended) [A] The system according to claim [6 in which the] 6, wherein said
2 presentation functionality is adapted to output information for use by said bill
3 payers using a browser.

1 8. (Amended) [A] The system according to claim [1 in which the] 1, wherein said
2 presentation functionality employs style sheet functionality in order to render
3 information in a form suitable for said bill payers.

1 9. (Amended) [A] The system according to claim [6 in which] 6, wherein
2 information is provided to said bill payers using markup language.

1 10. (Amended) [A] The system [for presenting and paying bills, comprising:]
2 according to claim 1, further comprising

3 [a. parsing functionality which is adapted to parse billing data from
4 a plurality of billers using rules according to which the parsing functionality is

5 programmed, corresponding to a plurality of data types, and to provide relevant
6 information for further use by said system;]

7 [b. a common document model processing functionality adapted to
8 transform said relevant information into a common document model, which
9 common document model is adapted to accommodate said relevant information
10 from the plurality of billers and according to the plurality of data types;]

11 [c. a database adapted to store the transformed information from
12 the common document model processing functionality; and]

13 [d. presentation functionality adapted to retrieve information from said
14 database and output at least some of said information via a network for use by bill
15 payers; and]

16 [e.] an interactivity functionality adapted to detect and respond to
17 communications from [a] said bill [payer,] payers, by at least (i) retrieving
18 information from said database and presenting it to said bill [payer] payers in a
19 form requested by said bill [payer,] payers; and (ii) altering information in said
20 database corresponding to said bill [payer] payers according to said
21 communications.

1 11. (Amended) [A] The system [for presenting and paying bills, comprising:]
2 according to claim 1, further comprising

3 [a. parsing functionality which is adapted to parse billing data
4 from a plurality of billers using rules according to which the parsing functionality
5 is programmed, said billing data corresponding to a plurality of data types, and to

6 provide relevant information for further use by said system;]

7 [b. a common document model processing functionality adapted
8 to transform said relevant information into a common document model, which
9 common document model is adapted to accommodate said relevant information
10 from the plurality of billers and according to the plurality of data types;]

11 [c. a database adapted to store the transformed information from
12 [the] said common document model processing functionality; and]

13 [d. presentation functionality adapted to retrieve information from said
14 database and output at least some of said information via a network for use by bill
15 payers; and]

16 [e.] interactivity functionality adapted to detect and respond to
17 communications from [a biller,] said plurality of billers by at least retrieving
18 information from said database corresponding to said [biller] plurality of billers
19 and presenting it to said [biller] plurality of billers in a form requested by said
20 [biller.] plurality of billers.

1 12. (Amended) [A] The system according to claim [11] 11, further comprising
2 interactivity functionality adapted to detect and respond to communications from
3 [a] said bill [payer,] payers, by at least (i) retrieving information from said
4 database and presenting it to said bill [payer] payers in a form requested by said
5 bill [payer;] payers; and (ii) altering information in said database corresponding to
6 said bill [payer] payers according to said communications.

1 13. (Amended) [A] The system [for presenting and paying bills, comprising:]

2 according to claim 1, further comprising

3 [a. parsing functionality which is adapted to parse billing data
4 from a plurality of billers using rules according to which the parsing functionality
5 is programmed, said billing data corresponding to a plurality of data types, and to
6 provide relevant information for further use by said system;]

7 [b. a common document model processing functionality adapted to
8 transform said relevant information into a common document model, which
9 common document model is adapted to accommodate said relevant information
10 from the plurality of billers and according to the plurality of data types;]

11 [c. a database adapted to store the transformed information from
12 the common document model processing functionality; and]

13 [d. a presentation functionality adapted to retrieve information
14 from said database and output at least some of said information via a network for
15 use by bill payers; and]

16 [e.] a biller interface coupled to said database adapted to allow [a
17 biller] said plurality of billers to alter appearance and content of bills presented to
18 said bill payers.

1 14. (Amended) [A] The system according to claim [13 in which the] 13, wherein
2 biller interface is further adapted to allow [the biller] said plurality of billers to
3 communicate with said bill payers regarding said bills.

1 15. (Amended) [A] The system according to claim [13] 13, further comprising
2 interactivity functionality adapted to detect and respond to communications from

3 [the biller,] said plurality of billers, by at least retrieving information from said
4 database corresponding to said [biller] plurality of billers and presenting it to said
5 [biller] plurality of billers in a form requested by said [biller.] plurality of billers.

1 16. (Amended) [A] The system according to claim [13] 13, further comprising
2 interactivity functionality adapted to detect and respond to communications from
3 [a] said bill [payer,] payers by at least (i) retrieving information from said database
4 and presenting it to said bill [payer] payers in a form requested by said bill
5 [payer,] payers and (ii) altering information in said database corresponding to said
6 bill [payer] payers according to said communications.

1 17. (Amended) [A] The system [for presenting and paying bills, comprising:]
2 according to claim 1, further comprising

3 [a. parsing functionality which is adapted to parse billing data
4 from a plurality of billers using rules according to which the extractor is
5 programmed, said billing data corresponding to a plurality of data types, and to
6 provide relevant information for further use by said system;]

7 [b. a common document model processing functionality adapted to
8 transform said relevant information into a common document model, which
9 common document model is adapted to accommodate said relevant information
10 from the plurality of billers and according to the plurality of data types;]

11 [c. a database adapted to store the transformed information from
12 the common document model processing functionality;]

13 [d. presentation functionality adapted to retrieve information from

14 said database and output at least some of said information via a network for use by
15 bill payers; and]

16 [e.] a financial source interface adapted to send and receive
17 communications to and from at least one financial entity and to alter information
18 in said database according to said financial source communications.

1 18. (Amended) [A] The system [for presenting and paying bills, comprising:]
2 according to claim 1, further comprising

3 [a. parsing functionality which is adapted to parse billing data
4 from a plurality of billers using rules according to which the extractor is
5 programmed, said billing data corresponding to a plurality of data types, and to
6 provide relevant information for further use by said system;]

7 [b. a common document model processing functionality adapted to
8 transform said relevant information into a common document model, which
9 common document model is adapted to accommodate relevant information from
10 the plurality of billers and according to the plurality of data types;]

11 [c. a database adapted to store the transformed information from
12 the common document model processing functionality;]

13 [d. a presentation functionality adapted to retrieve information
14 from said database and output at least some of said information via a network for
15 use by bill payers;]

16 [e.] interactivity functionality adapted to detect and respond to
17 communications from [a] said bill [payer] payers regarding at least one of said

18 [bill payer's] bills of said bill payers presented by said system, by at least (i)
19 retrieving information from said database and presenting it to said bill [payer]
20 payers in a form requested by said bill [payer;] payers; and (ii) altering
21 information in said database corresponding to said bill [payer] payers according to
22 said communications; and

23 [f.] a financial source interface adapted to send and receive communications
24 to and from at least one financial entity based at least in part on communications
25 from said bill [payer] payers and to alter information in said database
26 corresponding to said [bill] bills of said [payer,] payers, according at least in part
27 to said financial source communications.

1 19. (Amended) [A] The system according to claim [18] 18, further comprising
2 interactivity functionality adapted to detect and respond to communications from
3 [a biller,] said plurality of billers, by at least retrieving information from said
4 database corresponding to said [biller] plurality of billers and presenting it to said
5 [biller] plurality of billers in a form requested by said [biller.] plurality of billers.

1 20. (Amended) [A] The system according to claim [18 in which] 18, wherein said
2 interactivity functionality is adapted to report information to plurality of billers
3 relating at least to status of payment on their bills presented by said system.

1 21. (Amended) A method of providing electronic bill presentment and payment
2 services, comprising the steps of:

3 [a.] extracting relevant information from billing data,
4 corresponding to a plurality of data types, from a plurality of billers using rules of

5 conversion;

6 [b.] transforming said relevant information into a common
7 document model, which common document model is adapted to accommodate
8 said relevant information from [the] said plurality of billers and according to [the]
9 said plurality of data types;

10 [c.] storing [the] said transformed information from [the] said common
11 document model in a database; and

12 [d.] retrieving said transformed information from said database and
13 outputting at least some of said information via a network for use by bill payers.

1 22. (Amended) The method of claim [21 in which] 21, wherein said billing data is
2 from a print stream of data provided by [a biller.] said plurality of billers.

3
1 23. (Amended) The method of claim [21 in which] 21, wherein said billing data is
2 from a data interchange stream of data provided by [a biller.] said plurality of
3 billers.

1 24. (Amended) The method of claim [21 in which] 21, wherein said billing data is
2 from a financial data stream provided by [a biller.] said plurality of billers.

1 25. (Amended) The method of claim [21 in which] 21, wherein said at least some
2 of said information is output for use by said bill payers using financial software.

1 26. (Amended) The method of claim [21 in which] 21, wherein said at least some
2 of said information is output for use by said bill payers not using financial
3 software.

1 27. (Amended) The method of claim [21 in which] 21, wherein said at least some
2 of said information is output for use by said bill payers using a browser.

1 28. (Amended) The method of claim [21 in which] 21, wherein said at least some
2 of said information is output using style sheet functionality in order to render
3 information in a form suitable for said bill payers.

1 29. (Amended) The method of claim [26 in which] 26, wherein said at least some
2 of said information is provided to said bill payers using markup language.

1 30. (Amended) [A] The method of [providing electronic bill presentment and
2 payment services,] of claim 21, further comprising the [steps of:] step of

3 [a. extracting relevant information from billing data,
4 corresponding to a plurality of data types, from a plurality of billers using rules;]

5 [b. transforming said relevant information into a common
6 document model, which common document model is adapted to accommodate
7 said relevant information from the plurality of billers and according to the plurality
8 of data types;]

9 [c. storing the transformed information from the common
10 document model in a database;]

11 [d. retrieving said transformed information from said database and
12 outputting at least some of said information via a network for use by bill payers;
13 and]

14 [e.] detecting and responding to communications from [a] bill [payer,]
15 payers, by at least (i) retrieving information from said database and presenting it to

16 said bill [payer] payers in a form requested by said bill [payer;] payers and (ii)
17 altering information in said database corresponding to said bill [payer] payers
18 according to said communications.

1 32. (Amended) [A] The method of [providing electronic bill presentment and
2 payment services,] claim 21, further comprising the [steps of:] step of
3 [a.] extracting relevant information from billing data,
4 corresponding to a plurality of data types, from a plurality of billers using rules of
5 conversion;

6 [b.] transforming said relevant information into a common
7 document model, which common document model is adapted to accommodate
8 said relevant information from [the] said plurality of billers and according to [the]
9 said plurality of data types;

10 [c.] storing [the] said transformed information from [the] said common
11 document model in a database;

12 [d.] retrieving said transformed information from said database and
13 outputting at least some of said information via a network for use by bill payers;
14 and

15 [e.] detecting and responding to communications from [a biller,] said
16 plurality of billers, by at least retrieving information from said database
17 corresponding to said [biller] plurality of billers and presenting it to said [biller]
18 plurality of billers in a form requested by said [biller.] plurality of billers.

1 33. (Amended) [A] The method of [providing electronic bill presentment and

2 payment services,] of claim 21, further comprising the [steps of:] step of
3 [a.] extracting relevant information from billing data,
4 corresponding to a plurality of data types, from a plurality of billers using rules of
5 conversion;
6 [b.] transforming said relevant information into a common
7 document model, which common document model is adapted to accommodate
8 said relevant information from [the] said plurality of billers and according to [the]
9 said plurality of data types;
10 [c.] storing [the] said transformed information from [the] said common
11 document model in a database;
12 [d.] retrieving said transformed information from said database and
13 outputting at least some of said information via a network for use by bill payers;
14 and
15 [e.] allowing [a biller] said plurality of billers to alter appearance and
16 content of bills presented to said bill payers.

1 34. (Amended) The method of claim [33] 33, further comprising the step of
2 allowing [the biller] said plurality of billers to communicate with said bill payers
3 regarding said bills.

1 35. (Amended) [A] The method [of providing electronic bill presentment and
2 payment services,] of claim 21, further comprising the [steps of:] step of
3 [a. extracting relevant information from billing data, corresponding to a
4 plurality of data types, from a plurality of billers using rules;]

5 [b. transforming said relevant information into a common
6 document model, which common document model is adapted to accommodate
7 said relevant information from the plurality of billers and according to the plurality
8 of data types;]

9 [c. storing the transformed information from the common
10 document model in a database;]

11 [d. retrieving said transformed information from said database and
12 outputting at least some of said information via a network for use by bill payers;
13 and]

14 [e.] sending and receiving communications to and from at least one
15 financial entity and altering and storing information according to said
16 communications.

1 36. (Amended) [A] The method [of providing electronic bill presentment and
2 payment services,] of claim 21, further comprising the [steps of:] steps of

3 [a. extracting relevant information from billing data,
4 corresponding to a plurality of data types, from a plurality of billers using rules;]

5 [b. transforming said relevant information into a common
6 document model, which common document model is adapted to accommodate
7 said relevant information from [the] plurality of billers and according to the
8 plurality of data types;]

9 [c. storing the transformed information from the common
10 document model in a database; and]

11 [d. retrieving said transformed information from said database and
12 outputting at least some of said information via a network for use by bill payers;]
13 [e.] detecting and responding to communications from [a] said bill [payer]
14 payers regarding at least one of said [payer's] bills of said bill payers presented by
15 said system, by at least (i) retrieving information from said database and
16 presenting it to said bill [payer] payers in a form requested by said bill [payer;]
17 payers and (ii) altering information in said database corresponding to said bill
18 [payer] payers according to said communications; and
19 [f.] sending and receiving communications to and from at least
20 one financial entity based at least in part on communications from said bill [payer]
21 payers and to alter information in said database corresponding to said [bill] bills of
22 said bill [payer,] payers, according at least in part to said communications.

1 37. (Amended) The method of claim [36] 36, further comprising the step of
2 detecting and responding to communications from [a biller,] said plurality of
3 billers, by at least retrieving information from said database corresponding to said
4 [biller] plurality of billers and presenting it to said [biller] plurality of billers in a
5 form requested by said [biller.] plurality of billers.

1 38. (Amended) The method of claim [36] 36, further comprising the step of
2 reporting information to said plurality of billers relating at least to status of
3 payment on [their] said bills presented to said system.

1 39. (Amended) A system for presenting and paying bills, comprising:

2 [a.] an extractor functionality which is adapted to parse billing data

3 from a plurality of billers using rules of conversion according to which the
4 extractor functionality is programmed, corresponding to a plurality of data types,
5 and to provide relevant information for further use by said system;

6 [b.] a common document model processing functionality adapted to
7 transform said relevant information into a common document model, which
8 common document model is adapted to accommodate said relevant information
9 from [the] said plurality of billers and according to [the] said plurality of data
10 types;

11 [c.] a database adapted to store [the] said transformed information from
12 [the] said common document model processing functionality; and

13 [d.] presentation functionality adapted to retrieve information from
14 said database and output at least some of said information via a network for use by
15 bill payers; and

16 [e.] a bill payer interface coupled to said database adapted to allow
17 [a] said bill [payer] payers to pay bills electronically.

1 40. (Amended) The system of claim [39 in which] 39, wherein said interface is
2 adapted to allow said bill [payer] payers to specify the location of said output.

1 41. (Amended) A system for presenting and paying bills, comprising:

2 [a.] parsing functionality which is adapted to parse billing data
3 from a plurality of billers using rules of conversion according to which [the] said
4 parsing functionality is programmed, said billing data corresponding to a plurality
5 of data types, and to provide relevant information for further use by said system;

6 [b.] a common document model processing functionality adapted to
7 transform said relevant information into a common document model, which
8 common document model is adapted to accommodate said relevant information
9 from [the] said plurality of billers and according to [the] said plurality of data
10 types;

11 [c.] a database adapted to store [the] said transformed information from
12 [the] said common document model processing functionality;

13 [d.] a presentation functionality adapted to retrieve information
14 from said database and output at least some of said information via a network for
15 use by bill payers; and

16 [e.] a biller interface coupled to said database adapted to allow [a biller]
17 said plurality of billers to identify market segments of said bill payers according
18 to market rules and information retrieved from said database.

1 42. (Amended) A system according to claim [41 in which the] 41, wherein said
2 biller interface is further adapted to allow [the biller] said plurality of billers to
3 alter appearance and content of bills presented to said bill payers based on [the]
4 said market segments.

1 43. (Amended) A system according to claim [41 in which the] 41, wherein said
2 biller interface is further adapted to allow [the biller] said plurality of billers to
3 send marketing messages to said bill payers based on [the] said market segments.

1 44. (Amended) A system according to claim [41 in which the] 41, wherein said
2 biller interface is further adapted to allow [the biller] said plurality of billers to

3 communicate with said bill payers regarding said bills based on [the] said market
4 segments.

1 45. (Amended) A system for presenting and paying bills, comprising:

2 [a.] parsing functionality which is adapted to parse billing data
3 from a plurality of billers using rules of conversion according to which [the] said
4 parsing functionality is programmed, said billing data corresponding to a plurality
5 of data types, and to provide relevant information for further use by said system;

6 [b.] a common document model processing functionality adapted to
7 transform said relevant information into a common document model, which
8 common document model is adapted to accommodate said relevant information
9 from [the] said plurality of billers and according to [the] said plurality of data
10 types;

11 [c.] a database adapted to store [the] said transformed information from
12 [the] said common document model processing functionality;

13 [d.] a presentation functionality adapted to retrieve information
14 from said database and output at least some of said information via a network for
15 use by bill payers; and

16 [e.] interactivity functionality adapted to detect and respond to
17 communications from [a biller] said plurality of billers regarding market segments
18 of said bill payers by retrieving information from said database and altering
19 appearance and content of bills presented to said bill payers based on said
20 communications.

1 46. (Amended) A system for presenting and paying bills, comprising:
2 [a.] parsing functionality which is adapted to parse billing data
3 from a plurality of billers using rules of conversion according to which [the] said
4 parsing functionality is programmed, said billing data corresponding to a plurality
5 of data types, and to provide relevant information for further use by said system;
6 [b.] a common document model processing functionality adapted to
7 transform said relevant information into a common document model, which
8 common document model is adapted to accommodate said relevant information
9 from [the] said plurality of billers and according to [the] said plurality of data
10 types;
11 [c.] a database adapted to store [the] said transformed information from
12 [the] said common document model processing functionality;
13 [d.] a presentation functionality adapted to retrieve information
14 from said database and output at least some of said information via a network for
15 use by bill payers; and
16 [e.] interactivity functionality adapted to detect and respond to
17 communications from [a biller] said plurality of billers regarding market segments
18 of said bill payers by retrieving information from said database and sending
19 marketing messages to said bill payers based on said communications.

1 [47. (Cancelled) A system for presenting and paying bills, comprising:
2 a. parsing functionality which is adapted to parse billing data
3 from a plurality of billers using rules according to which the parsing functionality

4 is programmed, said billing data corresponding to a plurality of data types, and to
5 provide relevant information for further use by said system;

6 b. a common document model processing functionality adapted to
7 transform said relevant information into a common document model, which
8 common document model is adapted to accommodate said relevant information
9 from the plurality of billers and according to the plurality of data types;

10 c. a database adapted to store the transformed information from
11 the common document model processing functionality;

12 d. a presentation functionality adapted to retrieve information
13 from said database and output at least some of said information via a network for
14 use by bill payers; and

15 e. interactivity functionality adapted to detect and respond to
16 communications from a biller regarding market segments of bill payers by
17 retrieving information from said database and altering information in said
18 database corresponding to bill payers according to said communications.]

1 48. (Amended) A system for presenting and paying bills, comprising:

2 [a.] parsing functionality which is adapted to parse billing data
3 from a plurality of billers using rules of conversion according to which [the] said
4 parsing functionality is programmed, said billing data corresponding to a plurality
5 of data types, and to provide relevant information for further use by said system;

6 [b.] a common document model processing functionality adapted to
7 transform said relevant information into a common document model, which

8 common document model is adapted to accommodate relevant information from
9 [the] said plurality of billers and according to [the] said plurality of data types;
10 [c.] a database adapted to store [the] said transformed information from
11 [the] said common document model processing functionality;
12 [d.] a presentation functionality adapted to retrieve information
13 from said database and output at least some of said information via a network for
14 use by bill payers; and
15 [e.] an agent interface coupled to said database adapted to allow [an agent]
16 a plurality of agents having [an] agency [relationship] relationships with [a biller]
17 said plurality of billers to communicate with said bill payers regarding bills.

1 49. (Amended) A system according to claim [48 in which the agent] 48, wherein
2 said plurality of agents interface is further adapted to allow [the agent] said
3 plurality of agents to communicate with [the biller] said plurality of billers
4 regarding said bills of said bill payers.

1 50. (Amended) A system for presenting and paying bills, comprising;
2 [a.] parsing functionality which is adapted to parse billing data
3 from a plurality of billers using rules of conversion according to which [the] said
4 parsing functionality is programmed, said billing data corresponding to a plurality
5 of data types, and to provide relevant information for further use by said system;
6 [b.] a common document model processing functionality adapted to
7 transform said relevant information into a common document model, which
8 common document model is adapted to accommodate relevant information from

9 [the] said plurality of billers and according to [the] said plurality of data types;
10 [c.] a database adapted to store [the] said transformed information from
11 [the] said common document model processing functionality;
12 [d.] a presentation functionality adapted to retrieve information
13 from said database and output at least some of said information via a network for
14 use by bill payers;
15 [e.] bill payer interactivity functionality adapted to detect and
16 respond to communications from [a] said bill [payer,] payers, by at least retrieving
17 information from said database corresponding to said bill [payer] payers and
18 presenting said information to said bill [payer] payers in a form requested by said
19 bill [payer;] payers; and
20 [f.] biller interactivity functionality adapted to detect and
21 respond to communications from [a biller,] said plurality of billers, by at least
22 retrieving information from said database corresponding to said [biller] plurality of
23 billers and presenting said information to said [biller] plurality of billers in a form
24 requested by said [biller.] plurality of billers.

1 51. (Amended) A system according to claim [50 in which the] 50, wherein said
2 biller interactivity functionality and [the] said bill payer interactivity functionality
3 are further adapted to present substantially the same information to [the biller] said
4 plurality of billers and [the] said bill [payer] payers in order to allow [the biller]
5 said plurality of billers to interact with [the] said bill [payer] payers regarding [the]
6 said same information.

1 52. (New Claim) A system for presenting and paying bills, comprising;
2 a modularized input processing engine, said input processing engine
3 adapted to preprocess billing data from a plurality of billers corresponding to a
4 plurality of data types;
5 a parsing engine including parsing functionality which is adapted to parse
6 said billing data from a plurality of billers using rules of conversion according to
7 which said parsing functionality is programmed, said billing data corresponding to
8 said plurality of data types, and to provide relevant information for further use by
9 said system;
10 a common document model processing functionality adapted to
11 transform said relevant information into a common document model, which
12 common document model is adapted to accommodate relevant information from
13 said plurality of billers and according to said plurality of data types;
14 a database adapted to store said transformed information from
15 said common document model processing functionality; and
16 a presentation functionality adapted to retrieve information
17 from said database and output at least some of said information via a network for
18 use by bill payers.

1 53. (New Claim) The system according to claim 52, further comprising an
2 interactivity functionality adapted to detect and respond to communications from
3 said bill payers, by at least (i) retrieving information from said database and
4 presenting it to said bill payers in a form requested by said bill payers; and (ii)

5 altering information in said database corresponding to said bill payers according to
6 said communications.

1 54. (New Claim) The system according to claim 52, further comprising a financial
2 source interface adapted to send and receive communications to and from at least
3 one financial entity and to alter information in said database according to said
4 financial source communications.

1 55. (New Claim) The system according to claim 52, further comprising a financial
2 source interface adapted to send and receive communications to and from at least
3 one financial entity based at least in part on communications from said bill payers
4 and to alter information in said database corresponding to said bills of said payers,
5 according at least in part to said financial source communications.

1 56. (New Claim) The system according to claim 52, further comprising detecting
2 and responding to communications from bill payers, by at least (i) retrieving
3 information from said database and presenting it to said bill payers in a form
4 requested by said bill payers and (ii) altering information in said database
5 corresponding to said bill payers according to said communications.

1 57. (New Claim) The system according to claim 52, further comprising sending
2 and receiving communications to and from at least one financial entity based at
3 least in part on communications from said bill payers and to alter information in
4 said database corresponding to said bills of said bill payers, according at least in
5 part to said communications.

1 58. (New Claim) The system according to claim 52, further comprising a biller

2 interface coupled to said database adapted to allow said plurality of billers to
3 identify market segments of said bill payers according to market rules and
4 information retrieved from said database.

1 59. (New Claim) The system according to claim 52, further comprising
2 interactivity functionality adapted to detect and respond to communications from
3 said plurality of billers regarding market segments of said bill payers by retrieving
4 information from said database and altering appearance and content of bills
5 presented to said bill payers based on said communications.

1 60. (New Claim) The system according to claim 52, further comprising
2 interactivity functionality adapted to detect and respond to communications from
3 said plurality of billers regarding market segments of said bill payers by retrieving
4 information from said database and sending marketing messages to said bill payers
5 based on said communications.

1 61. (New Claim) The system according to claim 52, further comprising an agent
2 interface coupled to said database adapted to allow a plurality of agents having
3 agency relationships with said plurality of billers to communicate with said bill
4 payers regarding bills.

1 62. (New Claim) The system according to claim 52, further comprising bill payer
2 interactivity functionality adapted to detect and respond to communications from
3 said bill payers, by at least retrieving information from said database
4 corresponding to said bill payers and presenting said information to said bill
5 payers in a form requested by said bill payers; and biller interactivity functionality

adapted to detect and respond to communications from said plurality of billers, by
at least retrieving information from said database corresponding to said plurality
of billers and presenting said information to said plurality of billers in a form
requested by said plurality of billers.

63. (New Claim) A method of providing electronic bill presentment and payment
services, comprising the steps of:

modularizing the preprocessing of billing data from a plurality of billers
corresponding to a plurality of data types;

extracting relevant information from said billing data, corresponding to said
plurality of data types, from said plurality of billers using rules of conversion;

transforming said relevant information into a common document model,
which common document model is adapted to accommodate said relevant
information from said plurality of billers and according to said plurality of data
types;

storing said transformed information from said common
document model in a database; and

retrieving said transformed information from said database and

outputting at least some of said information via a network for use by bill
payers.

64. (New Claim) The method of claim 63, wherein said billing data is from a print
stream of data provided by said plurality of billers.

65. (New Claim) The method of claim 63, wherein said billing data is from a data

2 interchange stream of data provided by said plurality of billers.

1 66. (New Claim) The method of claim 63, wherein said billing data is from a
2 financial data stream provided by said plurality of billers.

1 67. (Amended) The method of claim 63, wherein said at least some of said
2 information is output for use by said bill payers using financial software.

1 68. (New Claim) The method of claim 63, wherein said at least some of said
2 information is output for use by said bill payers not using financial software.

1 69. (New Claim) The method of claim 63, wherein said at least some of said
2 information is output for use by said bill payers using a browser.

1 70. (New Claim) The method of claim 63, wherein said at least some of said
2 information is output using style sheet functionality in order to render information
3 in a form suitable for said bill payers.

1 71. (New Claim) The method of claim 68, wherein said at least some of said
2 information is provided to said bill payers using markup language.

1 72. (New Claim) A system for presenting and paying bills, comprising:
2 parsing functionality which is adapted to parse billing data from a plurality
3 of billers using rules of conversion according to which said parsing functionality is
4 programmed, corresponding to a plurality of data types, and to provide relevant
5 information for further use by said system;

6 a common document model processing functionality adapted to transform
7 said relevant information into a common document model, said common
8 document model is adapted to accommodate said relevant information from said

plurality of billers and according to said plurality of data types;
a database adapted to store said transformed information from
said common document model processing functionality;
presentation functionality adapted to retrieve information from said
database and output at least some of said information via a network for use by bill
payers; and
control functionality adapted to allow said plurality of billers to control at
least one of said parsing functionality, said common document model
functionality, said database functionality, and said presentation functionality.

73. (New Claim) The system according to claim 72, further comprising an
interactivity functionality adapted to detect and respond to communications from
said bill payers, by at least (i) retrieving information from said database and
presenting it to said bill payers in a form requested by said bill payers; and (ii)
altering information in said database corresponding to said bill payers according to
said communications.

74. (New Claim) The system according to claim 72, further comprising a financial
source interface adapted to send and receive communications to and from at least
one financial entity and to alter information in said database according to said
financial source communications.

75. (New Claim) The system according to claim 72, further comprising a financial
source interface adapted to send and receive communications to and from at least
one financial entity based at least in part on communications from said bill payers

4 and to alter information in said database corresponding to said bills of said payers,
5 according at least in part to said financial source communications.

1 76. (New Claim) The system according to claim 72, further comprising detecting
2 and responding to communications from bill payers, by at least (i) retrieving
3 information from said database and presenting it to said bill payers in a form
4 requested by said bill payers and (ii) altering information in said database
5 corresponding to said bill payers according to said communications.

1 77. (New Claim) The system according to claim 72, further comprising sending
2 and receiving communications to and from at least one financial entity based at
3 least in part on communications from said bill payers and to alter information in
4 said database corresponding to said bills of said bill payers, according at least in
5 part to said communications.

1 78. (New Claim) The system according to claim 72, further comprising a biller
2 interface coupled to said database adapted to allow said plurality of billers to
3 identify market segments of said bill payers according to market rules and
4 information retrieved from said database.

1 79. (New Claim) The system according to claim 72, further comprising
2 interactivity functionality adapted to detect and respond to communications from
3 said plurality of billers regarding market segments of said bill payers by retrieving
4 information from said database and altering appearance and content of bills
5 presented to said bill payers based on said communications.

1 80. (New Claim) The system according to claim 72, further comprising

2 interactivity functionality adapted to detect and respond to communications from
3 said plurality of billers regarding market segments of said bill payers by retrieving
4 information from said database and sending marketing messages to said bill payers
5 based on said communications.

1 81. (New Claim) The system according to claim 72, further comprising an agent
2 interface coupled to said database adapted to allow a plurality of agents having
3 agency relationships with said plurality of billers to communicate with said bill
4 payers regarding bills.

1 82. (New Claim) The system according to claim 72, further comprising bill payer
2 interactivity functionality adapted to detect and respond to communications from
3 said bill payers, by at least retrieving information from said database
4 corresponding to said bill payers and presenting said information to said bill
5 payers in a form requested by said bill payers; and biller interactivity functionality
6 adapted to detect and respond to communications from said plurality of billers, by
7 at least retrieving information from said database corresponding to said plurality
8 of billers and presenting said information to said plurality of billers in a form
9 requested by said plurality of billers.